1632

CR[illegible]Error Corrected by the STIC Sys[illegible]ns Branch

Serial Number: 09/408,142 ENTERED #5

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" d[illegible] to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ***ending*** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

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***Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.**

3/1/95

RAW SEQUENCE LISTING DATE: 05/08/2000
PATENT APPLICATION: **US/09/408,142** TIME: 18:12:26

Input Set : **A:\Pto.amc**
Output Set: **N:\CRF3\05082000\I408142.raw**

```
      3 <110> APPLICANT: Nippon Shokubai Co. Ltd.
      5 <120> TITLE OF INVENTION: Process for Producing L-aspartic acid
      7 <130> FILE REFERENCE: PH-683
C-->  9 <140> CURRENT APPLICATION NUMBER: US/09/408,142
C-->  9 <141> CURRENT FILING DATE: 1999-09-29
      9 <150> PRIOR APPLICATION NUMBER: JP 10-278571
     10 <151> PRIOR FILING DATE: 1998-09-30
     12 <150> PRIOR APPLICATION NUMBER: JP 10-278579
     13 <151> PRIOR FILING DATE: 1998-09-30
     15 <160> NUMBER OF SEQ ID NOS: 3
     17 <170> SOFTWARE: PatentIn Ver. 2.0
     19 <210> SEQ ID NO: 1
     20 <211> LENGTH: 1573
     21 <212> TYPE: DNA
     22 <213> ORGANISM: Artificial Sequence
     24 <220> FEATURE:
     25 <223> OTHER INFORMATION: Description of Artificial Sequence:cDNA to mRNA of
     26       aspartase gene derived from Escherichia coli K-12
     28 <220> FEATURE:
     29 <221> NAME/KEY: CDS
     30 <222> LOCATION: (91)..(1524)
     32 <400> SEQUENCE: 1
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     34 atcattggca gcttgaaaaa gaaggttcac atg tca aac aac att cgt atc gaa  114
     35                                  Met Ser Asn Asn Ile Arg Ile Glu
     36                                    1               5
     37 gaa gat ctg ttg ggt acc agg gaa gtt cca gct gat gcc tac tat ggt   162
     38 Glu Asp Leu Leu Gly Thr Arg Glu Val Pro Ala Asp Ala Tyr Tyr Gly
     39      10                  15                  20
     40 gtt cac act ctg aga gcg att gta aac ttc tat atc agc aac aac aaa   210
     41 Val His Thr Leu Arg Ala Ile Val Asn Phe Tyr Ile Ser Asn Asn Lys
     42  25                  30                  35                  40
     43 atc agt gat att cct gaa ttt gtt cgc ggt atg gta atg gtt aaa aaa   258
     44 Ile Ser Asp Ile Pro Glu Phe Val Arg Gly Met Val Met Val Lys Lys
     45                  45                  50                  55
     46 gcc gca gct atg gca aac aaa gag ctg caa acc att cct aaa agt gta   306
     47 Ala Ala Ala Met Ala Asn Lys Glu Leu Gln Thr Ile Pro Lys Ser Val
     48              60                  65                  70
     49 gcg aat gcc atc att gcc gca tgt gat gaa gtc ctg aac aac gga aaa   354
     50 Ala Asn Ala Ile Ile Ala Ala Cys Asp Glu Val Leu Asn Asn Gly Lys
     51          75                  80                  85
     52 tgc atg gat cag ttc ccg gta gac gtc tac cag ggc ggc gca ggt act   402
     53 Cys Met Asp Gln Phe Pro Val Asp Val Tyr Gln Gly Gly Ala Gly Thr
     54      90                  95                  100
     55 tcc gta aac atg aac acc aac gaa gtg ctg gcc aat atc ggt ctg gaa   450
     56 Ser Val Asn Met Asn Thr Asn Glu Val Leu Ala Asn Ile Gly Leu Glu
     57 105                 110                 115                 120
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Input Set : A:\Pto.amc
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58 ctg atg ggt cac caa aaa ggt gaa tat cag tac ctg aac ccg aac gac   498
59 Leu Met Gly His Gln Lys Gly Glu Tyr Gln Tyr Leu Asn Pro Asn Asp
60                 125                 130                 135
61 cat gtt aac aaa tgt cag tcc act aac gac gcc tac ccg acc ggt ttc   546
62 His Val Asn Lys Cys Gln Ser Thr Asn Asp Ala Tyr Pro Thr Gly Phe
63             140                 145                 150
64 cgt atc gca gtt tac tct tcc ctg att aag ctg gta gat gcg att aac   594
65 Arg Ile Ala Val Tyr Ser Ser Leu Ile Lys Leu Val Asp Ala Ile Asn
66         155                 160                 165
67 caa ctg cgt gaa ggc ttt gaa cgt aaa gct gtc gaa ttc cag gac atc   642
68 Gln Leu Arg Glu Gly Phe Glu Arg Lys Ala Val Glu Phe Gln Asp Ile
69     170                 175                 180
70 ctg aaa atg ggt cgt acc cag ctg cag gac gca gta ccg atg acc ctc   690
71 Leu Lys Met Gly Arg Thr Gln Leu Gln Asp Ala Val Pro Met Thr Leu
72 185                 190                 195                 200
73 ggt cag gaa ttc cgc gct ttc agc atc ctg ctg aaa gaa gaa gtg aaa   738
74 Gly Gln Glu Phe Arg Ala Phe Ser Ile Leu Leu Lys Glu Glu Val Lys
75                 205                 210                 215
76 aac atc caa cgt acc gct gaa ctg ctg ctg gaa gtt aac ctt ggt gca   786
77 Asn Ile Gln Arg Thr Ala Glu Leu Leu Leu Glu Val Asn Leu Gly Ala
78             220                 225                 230
79 aca gca atc ggt act ggt ctg aac acg ccg aaa gag tac tct ccg ctg   834
80 Thr Ala Ile Gly Thr Gly Leu Asn Thr Pro Lys Glu Tyr Ser Pro Leu
81         235                 240                 245
82 gca gtg aaa aaa ctg gct gaa gtt act ggc ttc cca tgc gta ccg gct   882
83 Ala Val Lys Lys Leu Ala Glu Val Thr Gly Phe Pro Cys Val Pro Ala
84     250                 255                 260
85 gaa gac ctg atc gaa gcg acc tct gac tgc ggc gct tat gtt atg gtt   930
86 Glu Asp Leu Ile Glu Ala Thr Ser Asp Cys Gly Ala Tyr Val Met Val
87 265                 270                 275                 280
88 cac ggc gcg ctg aaa cgc ctg gct gtg aag atg tcc aaa atc tgt aac   978
89 His Gly Ala Leu Lys Arg Leu Ala Val Lys Met Ser Lys Ile Cys Asn
90                 285                 290                 295
91 gac ctg cgc ttg ctc tct tca ggc cca cgt gcc ggc ctg aac gag atc   1026
92 Asp Leu Arg Leu Leu Ser Ser Gly Pro Arg Ala Gly Leu Asn Glu Ile
93             300                 305                 310
94 aac ctg ccg gaa ctg cag gcg ggc tct tcc atc atg cca gct aaa gta   1074
95 Asn Leu Pro Glu Leu Gln Ala Gly Ser Ser Ile Met Pro Ala Lys Val
96         315                 320                 325
97 aac ccg gtt gtt ccg gaa gtg gtt aac cag gta tgc ttc aaa gtc atc   1122
98 Asn Pro Val Val Pro Glu Val Val Asn Gln Val Cys Phe Lys Val Ile
99     330                 335                 340
100 ggt aac gac acc act gtt acc atg gca gca gaa gca ggt cag ctg cag  1170
101 Gly Asn Asp Thr Thr Val Thr Met Ala Ala Glu Ala Gly Gln Leu Gln
102 345                 350                 355                 360
103 ttg aac gtt atg gag ccg gtc att ggc cag gcc atg ttc gaa tcc gtt  1218
104 Leu Asn Val Met Glu Pro Val Ile Gly Gln Ala Met Phe Glu Ser Val
105                 365                 370                 375
106 cac att ctg acc aac gct tgc tac aac ctg ctg gaa aaa tgc att aac  1266
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```
107 His Ile Leu Thr Asn Ala Cys Tyr Asn Leu Leu Glu Lys Cys Ile Asn
108             380                 385                 390
109 ggc atc act gct aac aaa gaa gtg tgc gaa ggt tac gtt tac aac tct   1314
110 Gly Ile Thr Ala Asn Lys Glu Val Cys Glu Gly Tyr Val Tyr Asn Ser
111         395                 400                 405
112 atc ggt atc gtt act tac ctg aac ccg ttc atc ggt cac cac aac ggt   1362
113 Ile Gly Ile Val Thr Tyr Leu Asn Pro Phe Ile Gly His His Asn Gly
114     410                 415                 420
115 gac atc gtg ggt aaa atc tgt gcc gaa acc ggt aag agt gta cgt gaa   1410
116 Asp Ile Val Gly Lys Ile Cys Ala Glu Thr Gly Lys Ser Val Arg Glu
117 425                 430                 435                 440
118 gtc gtt ctg gaa cgc ggt ctg ttg act gaa gcg gaa ctt gac gat att   1458
119 Val Val Leu Glu Arg Gly Leu Leu Thr Glu Ala Glu Leu Asp Asp Ile
120                 445                 450                 455
121 ttc tcc gta cag aat ctg atg cac ccg gct tac aaa gca aaa cgc tat   1506
122 Phe Ser Val Gln Asn Leu Met His Pro Ala Tyr Lys Ala Lys Arg Tyr
123             460                 465                 470
124 act gat gaa agc gaa cag taatcgtaca gggtagtaca aataaaaaag         1554
125 Thr Asp Glu Ser Glu Gln
126         475                                                     1573
127 gcacgtcaga tgacgtgcc
129 <210> SEQ ID NO: 2
130 <211> LENGTH: 20
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: Description of Artificial Sequence:Designed
136       oligonucleotide based on aspartase gene derived
137       from Escherichia coli K-12
139 <400> SEQUENCE: 2                                              20
140 ggataatcgt cggtcgaaaa
143 <210> SEQ ID NO: 3
144 <211> LENGTH: 19
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence:Designed
150       oligonucleotide based on aspartase gene derived
151       from Escherichia coli K-12
153 <400> SEQUENCE: 3                                              19
154 cgtcatctga cgtgccttt
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/408,142

DATE: 05/08/2000
TIME: 18:12:27

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05082000\I408142.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date